# NKMAXBio We support you, we believe in your research

# Recombinant human Biliverdin Reductase A/BLVRA protein

Catalog Number: ATGP0377

### **PRODUCT INFORMATION**

### **Expression system**

E.coli

#### **Domain**

3-296aa

#### UniProt No.

P53004

#### **NCBI Accession No.**

NP 000703

#### **Alternative Names**

Biliverdin reductase A, BLVR, BVRA, BLVRA, Biliverdin reductase A Biliverdin IX alpha reductase, BLVR A, BVR A, Zinc metalloprotein.

## **PRODUCT SPECIFICATION**

## **Molecular Weight**

33.3 kDa (295aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

#### Concentration

1mg/ml (determined by Bradford assay)

#### **Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

#### **Purity**

> 90% by SDS-PAGE

#### **Endotoxin level**

< 1 EU per 1ug of protein (determined by LAL method)

## **Biological Activity**

Specific activity is > 450pmol/min/ug, and is defined as the amount of enzyme that catalyze the reduction 1.0pmole of biliverdin of NADPH per minute at pH 8.8 at 25C.

## Tag

Non-Tagged

# **Application**

Enzyme Activity, SDS-PAGE

#### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.



# Recombinant human Biliverdin Reductase A/BLVRA protein

Catalog Number: ATGP0377

### **BACKGROUND**

## **Description**

BLVRA, also known as biliverdin reductase A, belongs to the gfo/idh/mocA family. This protein is an enzyme that converts biliverdin to bilirubin, converting a double-bond between the second and third pyrrole ring into a single-bond. (Bilirubin + NAD (P) + = biliverdin + NAD (P) H) Recombinant BLVRA protein was expressed in E. coli and purified by using conventional chromatography techniques.

## **Amino acid Sequence**

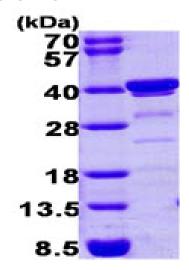
MAEPERKFGV VVVGVGRAGS VRMRDLRNPH PSSAFLNLIG FVSRRELGSI DGVQQISLED ALSSQEVEVA YICSESSSHE DYIRQFLNAG KHVLVEYPMT LSLAAAQELW ELAEQKGKVL HEEHVELLME EFAFLKKEVV GKDLLKGSLL FTAGPLEEER FGFPAFSGIS RLTWLVSLFG ELSLVSATLE ERKEDQYMKM TVCLETEKKS PLSWIEEKGP GLKRNRYLSF HFKSGSLENV PNVGVNKNIF LKDQNIFVQK LLGQFSEKEL AAEKKRILHC LGLAEEIQKY CCSRK

#### **General References**

Kravets A., et al. (2004) J Biol Chem. 279(19):19916-23. Franklin E., et al. (2007) Biochem J. 405(1):61-7.

## DATA

#### **SDS-PAGE**



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

